

□ 1400

## AFTER RECESS

The recess having expired, the House was called to order by the Speaker pro tempore (Mr. DESAULNIER) at 2 p.m.

## PRAYER

The Chaplain, the Reverend Patrick J. Conroy, offered the following prayer: God of the universe, we give You thanks for giving us another day.

We ask Your blessing in these days to come. You know well the contentiousness of this session. Look into the hearts of all the Members of this people's House to discern the good-will within.

May the goodwill You find be rewarded with Your grace. May any contrary spirit be banished.

In the days that come, help each Member to understand well and interpret positively, as they are able, the positions of those with whom they disagree. Grant to each the wisdom of Solomon and to us all the faith and confidence to know that, no matter how difficult things appear to be, You continue to walk with our Nation, as You have done over two centuries.

May all that is done in the people's House be for Your greater honor and glory.

Amen.

## THE JOURNAL

The SPEAKER pro tempore. The Chair has examined the Journal of the last day's proceedings and announces to the House his approval thereof.

Pursuant to clause 1, rule I, the Journal stands approved.

Mr. ROSE of New York. Mr. Speaker, pursuant to clause 1, rule I, I demand a vote on agreeing to the Speaker's approval of the Journal.

The SPEAKER pro tempore. The question is on the Speaker's approval of the Journal.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

Mr. ROSE of New York. Mr. Speaker, I object to the vote on the ground that a quorum is not present and make the point of order that a quorum is not present.

The SPEAKER pro tempore. Pursuant to clause 8, rule XX, further proceedings on this question will be postponed.

The point of no quorum is considered withdrawn.

## PLEDGE OF ALLEGIANCE

The SPEAKER pro tempore. Will the gentleman from New York (Mr. ROSE) come forward and lead the House in the Pledge of Allegiance.

Mr. ROSE of New York led the Pledge of Allegiance as follows:

I pledge allegiance to the Flag of the United States of America, and to the Repub-

lic for which it stands, one nation under God, indivisible, with liberty and justice for all.

## CONGRATULATING THE TOTTENVILLE PIRATES FOOTBALL TEAM

(Mr. ROSE of New York asked and was given permission to address the House for 1 minute.)

Mr. ROSE of New York. Mr. Speaker, I rise today to congratulate the Tottenville Pirates football team on an incredible season that took them all the way to the New York PSAL championship game at Yankee Stadium last week.

Now, although they came up just short of their ultimate goal, the Pirates should be incredibly proud of what they accomplished this season. After a loss in their season opener, the Pirates bounced back with a remarkable 11-game winning streak, including a dramatic last-second victory in their first matchup with the eventual champions, Erasmus Hall.

In the championship game, their star running back, Roland Dempster, battled through a hamstring injury until he literally couldn't run anymore and had to be helped off the field by his teammates.

I think I speak for all of Staten Island when I say how incredibly proud I am of Coach Brian Neville and the entire Pirates team for putting up a hell of a fight.

Mr. Speaker, I ask all of my colleagues to join me in congratulating them, particularly the graduating seniors, and wishing them well in whatever comes next, both on and off the field.

## COMMUNICATION FROM THE CLERK OF THE HOUSE

The SPEAKER pro tempore laid before the House the following communication from the Clerk of the House of Representatives:

OFFICE OF THE CLERK,  
HOUSE OF REPRESENTATIVES,  
Washington, DC, December 9, 2019.

Hon. NANCY PELOSI,  
*The Speaker, House of Representatives,*  
Washington, DC.

DEAR MADAM SPEAKER: Pursuant to the permission granted in Clause 2(h) of Rule II of the Rules of the U.S. House of Representatives, the Clerk received the following message from the Secretary of the Senate on December 9, 2019, at 10:07 a.m.:

That the Senate passed S. 743.

That the Senate passed with an amendment H.R. 2486.

With best wishes, I am  
Sincerely,

CHERYL L. JOHNSON.

## RECESS

The SPEAKER pro tempore. Pursuant to clause 12(a) of rule I, the Chair declares the House in recess until approximately 3 p.m. today.

Accordingly (at 2 o'clock and 5 minutes p.m.), the House stood in recess.

□ 1501

## AFTER RECESS

The recess having expired, the House was called to order by the Speaker pro tempore (Mr. CUELLAR) at 3 o'clock and 1 minute p.m.

## ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, the Chair will postpone further proceedings today on motions to suspend the rules on which a recorded vote or the yeas and nays are ordered, or votes objected to under clause 6 of rule XX.

The House will resume proceedings on postponed questions at a later time.

## MSI STEM ACHIEVEMENT ACT

Ms. JOHNSON of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4372) to direct Federal science agencies and the Office of Science and Technology Policy to undertake activities to improve the quality of undergraduate STEM education and enhance the research capacity at the Nation's HBCUs, TCUs, and MSIs, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 4372

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

## SECTION 1. SHORT TITLE.

*This Act may be cited as the "MSI STEM Achievement Act".*

## SEC. 2. FINDINGS.

*Congress makes the following findings:*

(1) Evidence suggests that the supply of STEM workers is not keeping pace with the rapidly evolving needs of the public and private sector, resulting in a deficit often referred to as a STEM skills shortage.

(2) According to the Bureau of Labor Statistics, the United States will need one million additional STEM professionals than it is on track to produce in the coming decade.

(3) STEM occupations offer higher wages, more opportunities for advancement, and a higher degree of job security than non-STEM occupations.

(4) The composition of the STEM workforce does not reflect the current or projected diversity of the Nation, with Hispanics, African Americans, and other racial and ethnic minorities, significantly underrepresented in the STEM workforce compared to their presence in the workforce more generally.

(5) A stronger national commitment to increasing the diversity of the STEM workforce is needed to help address the STEM skills shortage.

(6) According to a 2019 National Academies of Sciences, Engineering, and Medicine report entitled "Minority Serving Institutions: America's Underutilized Resource for Strengthening the STEM Workforce", two- and four-year minority serving institutions enroll nearly 30 percent of all undergraduate students—a percentage that is expected to grow in the coming years—in the United States higher education system and play a critical role in providing important pathways to STEM-related education, training, and careers for students of color.

(7) HBCUs, TCUs, and MSIs are highly successful at educating underrepresented minority students in STEM fields and can serve as best

practice models for other colleges and universities to further expand participation of underrepresented minorities in the STEM workforce.

(8) Increased investment in STEM infrastructure at HBCUs, TCUs, and MSIs has the potential to increase these institutions' ability to educate even more students in the STEM disciplines.

(9) With the demand for STEM skills exceeding the supply of STEM graduates, success of HBCUs, TCUs, and MSIs in educating and training science and engineering leaders is increasingly important for United States economic growth and competitiveness.

### SEC. 3. GOVERNMENT ACCOUNTABILITY OFFICE REVIEW.

Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall report to Congress—

(1) an inventory of competitive funding programs and initiatives carried out by Federal science agencies that are targeted to HBCUs, TCUs, and MSIs or partnerships with HBCUs, TCUs, and MSIs;

(2) an assessment of Federal science agency outreach activities to increase the participation and competitiveness of HBCUs, TCUs, and MSIs in the funding programs and initiatives identified in paragraph (1); and

(3) recommendations of the Comptroller General to increase the participation of and the rate of success of HBCUs, TCUs, and MSIs in competitive funding programs offered by Federal science agencies.

### SEC. 4. RESEARCH AND CAPACITY BUILDING.

(a) **IN GENERAL.**—The Director of the National Science Foundation shall award grants, on a competitive basis, to institutions of higher education or nonprofit organizations (or consortia thereof) to—

(1) conduct research described in subsection (b) with respect to HBCUs, TCUs, and MSIs;

(2) conduct activities described in subsection (c) to build the capacity of HBCUs, TCUs, and MSIs to graduate students who are competitive in attaining and advancing in the STEM workforce;

(3) build the research capacity and competitiveness of HBCUs, TCUs, and MSIs in STEM disciplines; and

(4) identify and broadly disseminate effective models for programs and practices at HBCUs, TCUs, and MSIs that promote the education and workforce preparation of minority students pursuing STEM studies and careers in which such students are underrepresented.

(b) **RESEARCH.**—Research described in this subsection is research on the contribution of HBCUs, TCUs, and MSIs to the education and training of underrepresented minority students in STEM fields and to the meeting of national STEM workforce needs, including—

(1) the diversity with respect to local context, cultural differences, and institutional structure among HBCUs, TCUs, and MSIs and any associated impact on education and research endeavors;

(2) effective practices at HBCUs, TCUs, and MSIs and associated outcomes on student recruitment, retention, and advancement in STEM fields, including the ability for students to compete for fellowships, employment, and advancement in the workforce;

(3) contributions made by HBCUs, TCUs, and MSIs to local, regional, and national workforces;

(4) the unique challenges and opportunities for HBCUs, TCUs, and MSIs in attaining the resources needed for integrating effective practices in STEM education, including providing research experiences for underrepresented minority students;

(5) the access of students at HBCUs, TCUs, and MSIs to STEM infrastructure and any associated outcomes for STEM competency;

(6) models of STEM curriculum, learning, and teaching successful at HBCUs, TCUs, and MSIs

for increasing participation, retention, and success of underrepresented minority students; and

(7) successful or promising partnerships between HBCUs, TCUs, and MSIs and other institutions of higher education, private sector and non-profit organizations, Federal laboratories, and international research institutions.

(c) **CAPACITY BUILDING.**—Activities described in this subsection include the design, development, implementation, expansion, and assessment of—

(1) metrics of success to best capture the achievements of HBCUs, TCUs, and MSIs and students of such institutions to account for institutional context and missions, faculty investment, student populations, student needs, and institutional resource constraints;

(2) enhancements to undergraduate STEM curriculum at HBCUs, TCUs, and MSIs to increase the participation, retention, degree completion, and success of underrepresented students;

(3) professional development programs to increase the numbers and the high-quality preparation of STEM faculty at HBCUs, TCUs, and MSIs, including programs to encourage STEM doctoral students to teach at HBCUs, TCUs, and MSIs; and

(4) mechanisms for institutions of higher education that are not HBCUs, TCUs, or MSIs to partner with HBCUs, TCUs, and MSIs on STEM education, including the facilitation of student transfer, mentoring programs for students and junior faculty, joint research projects, and student access to graduate education.

(d) **RESEARCH EXPERIENCES.**—Grants under this section may fund the development or expansion of opportunities for the exchange of students and faculty to conduct research, including through partnerships with institutions of higher education that are not HBCUs, TCUs, or MSIs, private sector and non-profit organizations, Federal laboratories, and international research institutions.

(e) **PARTNERSHIPS.**—In awarding grants under this section, the Director of the National Science Foundation shall—

(1) encourage HBCUs, TCUs, and MSIs and consortia thereof and partnerships with one or more HBCU, TCU, or MSI, to submit proposals;

(2) require proposals submitted in partnership with one or more HBCU, TCU, or MSI include a plan for establishing a sustained partnership that is jointly developed and managed, draws from the capacities of each institution, and is mutually beneficial; and

(3) encourage proposals submitted in partnership with the private sector, non-profit organizations, Federal laboratories, and international research institutions, as appropriate.

(f) **MSI CENTERS OF INNOVATION.**—Grants under this section may fund the establishment of no more than five MSI Centers of Innovation to leverage successes of HBCUs, TCUs, and MSIs in STEM education and research training of underrepresented minority students as models for other institutions, including both HBCUs, TCUs, and MSIs and institutions of higher education that are not HBCUs, TCUs, or MSIs. Such centers will be located on campuses of selected institutions of higher education and serve as incubators to allow institutions of higher education to experiment, pilot, evaluate, and scale up promising practices.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Director of the National Science Foundation \$170,000,000 for fiscal year 2020, \$175,000,000 for fiscal year 2021, \$180,000,000 for fiscal year FY 2022, \$185,000,000 for fiscal year 2023, and \$190,000,000 fiscal year 2024 to carry out this section.

### SEC. 5. AGENCY RESPONSIBILITIES.

(a) **IN GENERAL.**—In consultation with outside stakeholders and the heads of the Federal science agencies, the Director shall develop a uniform set of policy guidelines for Federal

science agencies to carry out a sustained program of outreach activities to increase clarity, transparency, and accountability for Federal science agency investments in STEM education and research activities at HBCUs, TCUs, and MSIs.

(b) **OUTREACH ACTIVITIES.**—In developing policy guidelines under subsection (a) the Director shall include guidelines that require each Federal science agency—

(1) to designate a liaison for HBCUs, TCUs, and MSIs responsible for—

(A) enhancing direct communication with HBCUs, TCUs, and MSIs to increase the Federal science agency's understanding of the capacity and needs of such institutions and to raise awareness of available Federal funding opportunities at such institutions;

(B) coordinating programs, activities, and initiatives while accounting for the capacity and needs of HBCUs, TCUs, and MSIs;

(C) tracking Federal science agency investments in and engagement with HBCUs, TCUs, and MSIs; and

(D) reporting progress toward increasing participation of HBCUs, TCUs, and MSIs in grant programs;

(2) to publish annual forecasts of funding opportunities and proposal deadlines, including for grants, contracts, subcontracts, and cooperative agreements;

(3) to conduct on-site reviews of research facilities at HBCUs, TCUs, and MSIs, as practicable, and make recommendations regarding strategies for becoming more competitive in research;

(4) to hold geographically accessible or virtual workshops on research priorities of the Federal science agency and on how to write competitive grant proposals;

(5) to ensure opportunities for HBCUs, TCUs, and MSIs to directly communicate with Federal science agency officials responsible for managing competitive grant programs in order to receive feedback on research ideas and proposals, including guidance on the Federal science agency's peer review process;

(6) to foster mutually beneficial public-private collaboration among Federal science agencies, industry, Federal laboratories, academia, and nonprofit organizations to—

(A) identify alternative sources of funding for STEM education and research at HBCUs, TCUs, and MSIs;

(B) provide access to high-quality, relevant research experiences for students and faculty of HBCUs, TCUs, and MSIs;

(C) expand the professional networks of students and faculty of HBCUs, TCUs, and MSIs;

(D) broaden STEM educational opportunities for students and faculty of HBCUs, TCUs, and MSIs; and

(E) support the transition of students of HBCUs, TCUs, and MSIs into the STEM workforce; and

(7) to publish an annual report that provides an account of Federal science agency investments in HBCUs, TCUs, and MSIs, including data on the level of participation of HBCUs, TCUs, and MSIs as prime recipients/contractors or subrecipients/subcontractors.

(c) **STRATEGIC PLAN.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, the Director, in collaboration with the head of each Federal science agency, shall submit to Congress a report containing a strategic plan for each Federal science agency to increase the capacity of HBCUs, TCUs, and MSIs to compete effectively for grants, contracts, or cooperative agreements and to encourage HBCUs, TCUs, and MSIs to participate in Federal programs.

(2) **CONSIDERATIONS.**—In developing a strategic plan under paragraph (1), the Director and each head of each Federal science agency shall consider—

(A) issuing new or expanding existing funding opportunities targeted to HBCUs, TCUs, and MSIs;

(B) modifying existing research and development program solicitations to incentivize effective partnerships with HBCUs, TCUs, and MSIs;

(C) offering planning grants for HBCUs, TCUs, and MSIs to develop or equip grant offices with the requisite depth of knowledge to submit competitive grant proposals and manage awarded grants;

(D) offering additional training programs and individualized and timely guidance to grant officers and faculty researchers at HBCUs, TCUs, and MSIs to ensure they understand the requirements for an effective grant proposal; and

(E) other approaches for making current competitive funding models more accessible for under-resourced HBCUs, TCUs, and MSIs.

(d) REPORT TO CONGRESS.—Not later than 2 years after the date of enactment of this Act, and every 5 years thereafter, the Director shall report to Congress on the implementation by Federal science agencies of the policy guidelines developed under this section.

#### SEC. 6. DEFINITIONS.

In this Act:

(1) DIRECTOR.—The term “Director” means the Director of the Office of Science and Technology Policy.

(2) FEDERAL LABORATORY.—The term “Federal laboratory” has the meaning given such term in section 4 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3703).

(3) FEDERAL SCIENCE AGENCY.—The term “Federal science agency” means any Federal agency with an annual extramural research expenditure of over \$100,000,000.

(4) HBCU.—The term “HBCU” has the meaning given the term “part B institution” in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061).

(5) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(6) MINORITY SERVING INSTITUTION.—The term “minority serving institution” or “MSI” means Hispanic-Serving Institutions as defined in section 502 of the Higher Education Act of 1965 (20 U.S.C. 1101a); Alaska Native Serving Institutions and Native Hawaiian-Serving Institutions as defined in section 317 of the Higher Education Act of 1965 (20 U.S.C. 1059d); and Predominantly Black Institutions, Asian American and Native American Pacific Islander-Serving Institutions, and Native American-Serving Nontribal Institutions as defined in section 371 of the Higher Education Act of 1965 (20 U.S.C. 1067q(c)).

(7) STEM.—The term “STEM” has the meaning given the term in the STEM Education Act of 2015 (42 U.S.C. 1861 et seq.).

(8) TCU.—The term “TCU” has the meaning given the term “Tribal College or University” in section 316 of the Higher Education Act of 1965 (20 U.S.C. 1059c).

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Texas (Ms. JOHNSON) and the gentleman from Oklahoma (Mr. LUCAS) each will control 20 minutes.

The Chair recognizes the gentlewoman from Texas.

#### GENERAL LEAVE

Ms. JOHNSON of Texas. Mr. Speaker, I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and to include extraneous materials on H.R. 4372, the bill that is under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Texas?

There was no objection.

Ms. JOHNSON of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 4372, the MSI STEM Achievement Act, and I thank Representative WALTZ for joining me in introducing this bill and for his commitment to increasing diversity in Science, Technology, Engineering, and Math, or STEM fields.

This bill was developed based upon recommendations in the 2019 National Academy of Sciences report entitled, “Minority Serving Institutions: America’s Underutilized Resource for Strengthening the STEM Workforce.”

The demographics of our country are changing, and we must do more to address the underrepresentation of minority students in STEM to keep our workforce competitive.

As stated in the report, the STEM readiness of students of color will have direct implications on America’s economic growth, national security, and global prosperity. The time to act is now.

Minority-serving institutions have a long record of success in recruiting, retaining, and graduating underrepresented minority students in STEM. However, more investment and outreach are needed to enable the MSIs to realize their potential.

The MSI STEM Achievement Act ensures that Federal STEM education and research funding opportunities are more accessible to the MSIs. The legislation directs the Government Accountability Office to compile an inventory of Federal science agency programs targeted to MSIs and to make recommendations of what more agencies can do to encourage increased participation and success for the MSIs in these programs.

In addition, the legislation authorizes the National Science Foundation to support research on the challenges and successes MSIs have had in contributing to the STEM workforce, including approaches to building the research competitiveness of MSIs.

And finally, the bill directs the Office of Science and Technology Policy to develop a government-wide strategic plan and sustained outreach program to support STEM education and research at the MSIs.

It is important to remember that these institutions are not a monolith. Indeed, their focus on meeting the distinct needs of their students has been critical to their success. In carrying out the activities of this act, Federal science agencies and OSTP should ensure that they are accounting for the diversity among these institutions and the populations they serve. If we are to continue to prosper as a Nation, we must do more to diversify our STEM workforce.

Fortunately, the more than 700 MSIs that enroll nearly 30 percent of our Nation’s undergraduates know how to solve this problem. The MSI STEM Achievement Act will ensure these institutions are equipped with the resources they need to lead the way.

Mr. Speaker, I urge my colleagues to support this good, bipartisan bill, and I reserve the balance of my time.

Mr. LUCAS. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I am proud to cosponsor this legislation led by Chairwoman JOHNSON and Representative MICHAEL WALTZ, which continues the Committee on Science, Space, and Technology’s bipartisan work to support, encourage, and develop the next generation of America’s science, technology, engineering, mathematics, and computer science workforce.

Minority-serving institutions, including historically Black colleges and universities, Hispanic-serving institutions, and Tribal colleges and universities have a long record of success in recruiting, retaining, and graduating underrepresented students in STEM fields.

In my own district, I have seen the unique value of minority-serving institutions. For more than 100 years, Langston University, a historically Black college and land-grant institution, has educated students of all backgrounds. They have influenced people’s lives beyond the classroom in service to the community in both rural and urban Oklahoma. This legislation will help schools like Langston prepare their students to fill the STEM jobs of the 21st century.

Since 1990, employment in STEM occupations has grown by nearly 80 percent. Over the next decade, with demand continuing to grow and U.S. universities expected to produce only less than one-third of the STEM graduates needed, the STEM shortage is anticipated to reach 1 million professionals. At the same time, minorities are severely underrepresented in STEM fields, only accounting for 11 percent of the STEM workforce. To meet this growing demand, talent from all groups is essential.

The Trump administration has also recognized this need by calling for an increase of diversity, equality, and inclusion in Federal STEM programs in its recent 5-year STEM strategic plan.

This bill that we are considering today takes steps to meet the administration’s call to action by providing for increased transparency, accountability, and accessibility of Federal STEM education and research funds for MSIs. Without a diverse talent pool of Americans with strong STEM knowledge and skills prepared for the jobs of the future, the U.S. will not be able to maintain the innovation that supports key sectors of the economy, including agriculture, energy, healthcare, and defense.

I, again, thank Chairwoman JOHNSON and Representative WALTZ for their leadership. I encourage my colleagues to support this legislation, and I reserve the balance of my time.

Ms. JOHNSON of Texas. Mr. Speaker, I reserve the balance of my time.

Mr. LUCAS. Mr. Speaker, I yield 3 minutes to the gentleman from Florida (Mr. WALTZ).

Mr. WALTZ. Mr. Speaker, since 1904, the Bethune Cookman University, a

historically Black college, has contributed to a rich and diverse history in my district. Four thousand students proudly call this university home in Florida's Sixth District, and we are proud of all of Bethune Cookman's accomplishments, especially in STEM fields.

Minorities make up nearly 30 percent of America's population, but nationwide, as my distinguished colleague from Oklahoma and the administration have noted, we are seeing a gap in minority representation in STEM fields. Believe it or not, minorities only account for 11 percent of the STEM workforce.

As we all know, the demand for STEM fields is at an all-time high. Over the next decade, the STEM shortage is anticipated to reach 1 million professionals. If we want America to compete and succeed, we must and we need to make sure our workforce reflects our country's diversity. The bill we are considering today, the MSI STEM Achievement Act, would help increase the capacity for minority students and STEM curricula and encourage partnerships with industry and Federal laboratories.

In short, this bill will enhance our domestic workforce, so as to ensure America continues to compete globally. If America wants to lead militarily, economically, and critically in space, we must lead in STEM.

I would be remiss to not also mention the importance of women in STEM. As I have said countless times since I have been elected, and will continue to say, from my experiences as a veteran and a Green Beret fighting all over the globe, where women thrive in business, where women thrive in civil society and in politics, extremism doesn't, and it is just that simple. And for that reason, diversity in STEM is truly a national security issue.

And in Volusia County, in my district in Florida, just north of Cape Canaveral and just north of the Kennedy Space Center, we are seeing countless businesses participate in workforce development programs like the Space Coast Consortium Apprenticeship Program. This program and so many others are making huge strides to advance STEM curriculum and workforce development.

As the Republican lead on the MSI STEM Achievement Act, I want to thank Chairwoman JOHNSON and Ranking Member LUCAS for working with me to improve participation in STEM at these critically important MSIs.

For America's continued predominance in science and technology, I urge my colleagues to support this important bill and for its passage.

Ms. JOHNSON of Texas. Mr. Speaker, I reserve the balance of my time.

Mr. LUCAS. Mr. Speaker, I yield myself the balance of my time.

The United States is in a race to remain the world leader in science and technology. The only way we will win is by utilizing America's most valuable

resource, our people. This means developing a diverse, STEM-capable workforce at every educational level and from every background.

Creating opportunities for students to not only develop STEM knowledge but also to have hands-on experience is essential. Research shows that students, especially those from underrepresented minority backgrounds, are more likely to graduate from science and engineering programs if they have opportunities to engage in STEM course content with peers, participate in undergraduate research, and join science clubs and organizations.

This bill will support such STEM education and training activities at MSIs, providing these students with the skills necessary to develop and flourish in the 21st century. These investments will help grow our workforce, improve our economy, and protect our country.

I, again, would like to thank Chairwoman JOHNSON and Representative WALTZ for their leadership, and I encourage my colleagues to support this bill.

Mr. Speaker, I yield back the balance of my time.

Ms. JOHNSON of Texas. Mr. Speaker, I have no further requests for time, and I simply want to thank all of the Members and staff involved in this legislation. I urge its passage.

Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Texas (Ms. JOHNSON) that the House suspend the rules and pass the bill, H.R. 4372, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

□ 1515

## ENGINEERING BIOLOGY RESEARCH AND DEVELOPMENT ACT OF 2019

Ms. JOHNSON of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4373) to provide for a coordinated Federal research initiative to ensure continued United States leadership in engineering biology, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 4373

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### SECTION 1. SHORT TITLE.

This Act may be cited as the "Engineering Biology Research and Development Act of 2019".

### SEC. 2. FINDINGS.

The Congress makes the following findings:

(1) Cellular and molecular processes may be used, mimicked, or redesigned to develop new products, processes, and systems that improve societal well-being, strengthen na-

tional security, and contribute to the economy.

(2) Engineering biology relies on a workforce with a diverse and unique set of skills combining the biological, physical, chemical, and information sciences and engineering.

(3) Long-term research and development is necessary to create breakthroughs in engineering biology. Such research and development requires government investment as many of the benefits are too distant or uncertain for industry to support alone.

(4) Research is necessary to inform evidence-based governance of engineering biology and to support the growth of the engineering biology industry.

(5) The Federal Government can play an important role by facilitating the development of tools and technologies to further advance engineering biology, including user facilities, by facilitating public-private partnerships, by supporting risk research, and by facilitating the commercial application in the United States of research funded by the Federal Government.

(5) The United States led the development of the science and engineering techniques that created the field of engineering biology, but due to increasing international competition, the United States is at risk of losing its competitive advantage if does not invest the necessary resources and have a national strategy.

(6) A National Engineering Biology Initiative can serve to establish new research directions and technology goals, improve interagency coordination and planning processes, drive technology transfer to the private sector, and help ensure optimal returns on the Federal investment.

### SEC. 3. DEFINITIONS.

In this Act:

(1) BIOMANUFACTURING.—The term "biomanufacturing" means the utilization of biological systems to develop new and advance existing products, tools, and processes at commercial scale.

(2) ENGINEERING BIOLOGY.—The term "engineering biology" means the application of engineering design principles and practices to biological systems, including molecular and cellular systems, to advance fundamental understanding of complex natural systems and to enable novel or optimize functions and capabilities.

(3) INITIATIVE.—The term "Initiative" means the National Engineering Biology Research and Development Initiative established under section 4.

(4) OMICS.—The term "omics" refers to the collective technologies used to explore the roles, relationships, and actions of the various types of molecules that make up the cells of an organism.

### SEC. 4. NATIONAL ENGINEERING BIOLOGY RESEARCH AND DEVELOPMENT INITIATIVE.

(a) IN GENERAL.—The President, acting through the Office of Science and Technology Policy, shall implement a National Engineering Biology Research and Development Initiative to advance societal well-being, national security, sustainability, and economic productivity and competitiveness through—

(1) advancing areas of research at the intersection of the biological, physical, chemical, and information sciences and engineering to accelerate scientific understanding and technological innovation in engineering biology;

(2) advancing areas of biomanufacturing research to optimize, standardize, scale, and deliver new products and solutions;

(3) supporting social and behavioral sciences and economics research that advances the field of engineering biology and